

STAFF REPORT

TOWN COUNCIL MEETING OF OCTOBER 13, 2015

To:

Town Council

From:

Brit Snipes, Public Works Director

Dave Strock, Public Works Lead

Subject: Purchase of One Vermeer BC900XL Brush Chipper

Date:

October 2, 2015

RECOMMENDATION:

Staff recommends that the Town Council authorize the Town Manager to purchase a wood chipper including delivery, training and associated safety gear in an amount not to exceed \$27,000.

DISCUSSION:

The Town's maintenance crews will benefit greatly from a wood chipper. Currently trimming trees requires two trucks. The first truck carries the tools and has the bucket to reach the limbs; the second truck is the dump truck to haul the trimmings. The round trip to dump the trimmings typically takes 2 hours to secure the trimmings, drive time, preparing the material to dump, dumping it and returning to the job site.

A wood chipper will condense the amount of trimming into about one sixth the volume of unchipped trimmings. This will allow the crew to complete the work using only one truck, saving gas, time and effort. In addition, bins will be constructed at the Town's corporation yard so that the tree trimmings can be made available to the public for landscaping material. Providing a benefit to residents as well as reducing the amount of solid waste the town is ultimately responsible for.

Town Staff researched several different wood chipper manufactures, safety hardware and sizes. Given the Town's existing trucks and tree trimming needs, it was determined that a 9" chipper is the appropriate size for the Town. Similar bids were provided by two local dealers.

• Cal Line Equipment 9" Brush Bandit

\$ 22,895.46

• RDO Equipment 9" Vermeer BC900XL \$ 25,792.88

Staff determined that the bid from RDO Equipment for the Vermeer BC900XL is the most responsive bid and the best option for the Town. The Vermeer comes with superior built in safety equipment, quality, warranty and spare parts.

CEQA:

This discussion is exempt from CEQA.

FINANCIAL IMPLICATIONS:

This proposed purchase of a Vermeer BC900XL with training and associated safety equipment would cost \$ 27,000 from Fund 560 Solid Waste Reduction account (Total Available \$30,000)



Investment Proposal (Quote)

RDO Equipment Co. 3980 Research Drive Sacramento (VM) CA, 95838 Phone: (916) 643-0999 - Fax: (916) 643-0998

Proposal for: TOWN OF LOOMIS 3665 TAYLOR ROAD LOOMIS, CA, 95650 PLACER (916) 652-1840
 Investment Proposal Date:
 8/4/2015

 Pricing Valid Until:
 9/3/2015

 Deal Number:
 799806

 Customer Account#:
 1840027

 Account Manager:
 Kevin Connors

 Phone:
 (916) 643-0999

 Fax:
 (916) 643-0998

 Email:
 KConnors@rdoequipment.com

Quantity	Serial Number	Hours (approx.)	Status / Year / Make / Model Additional Items	Cash Price
1	1VRF102Y7F1000543	0	New 2015 VERMEER BC900XL	\$24,350.00
			Freight In	\$900.00
			Prep / Reconditioning PDI	\$175,00
			Customer Discount RDO INSTANT DISCOUNT	(\$1,500.00)
			Equipment Subtotal:	\$23,925.00

Purchase Order Totals Balance: \$23,925.00 \$23,925.00 **Total Taxable Amount:** Tax Rate 3: (CAPL 7.5%) \$1,794.38 \$1,794.38 Sales Tax Total: PrePaid Tax License: \$70.00 CA Tire TAX: \$3.50 Sub Total: \$25,792.88 Cash with Order: \$0.00 Balance Due: \$25,792.88

Equipment Options					
Quantity	Serial Number	Year / Make / Model	Description		
1	1VRF102Y7F1000543	2015 VERMEER BC900XL	BC900XL020 - ~BC900XL 3500 LBS AXLE W/O ELEC BRAKE & TIRES BC900XL040 - ~BC900XL RIGHT SIDE CONTROLS BC900XL056 - ~BC900XL DOMESTIC 7-WAY RV TRAILER PLUG BC900XL 060 - ~BC900XL PINTLE HITCH		



The Vermeer BC900XL brush chipper was designed to eliminate the guesswork out of chipping. No chucking. No ducking. Just smooth chipping performance. Able to chip heavily branched material up to 9" (23 cm) in diameter and 14" (35.5 cm) wide, the BC900XL is ideal for line clearing and general clean-up needs. In combination, the Vermeer exclusive SmartFeed system, and its 35 hp (26.1 kW) Briggs and Stratton Gas Engine, pulls in and processes difficult material.

Specifications

General Dimensions and Weights

Length - Feed Table Up, Tongue In: 140.4 " (356.6 cm)
Length - Table Down, Tongue Extended: 154.8 " (393.2 cm)

Width: 79.5 " (201.9 cm) Height: 101.5 " (257.8 cm)

Weight - Engine Option One: 2980 lbs (1351.7 kg)
Tongue Weight - Engine Option One: 300 lbs (136.1 kg)

Engine Option One

Make and Model: Briggs and Stratton Vanguard Gross Horsepower (Maximum): 35 hp (26.1 kw)

Torque (Max): 53 ft-lb (71.9 Nm)

Fuel Tank Capacity: 15 gal (56.8 L)

Max Fuel Consumption: 3.2 gph (12.1 lph)

Fuel Type: Gasoline

Air Cleaner: Dry-type safety element and restriction indicator

Oil Filter: Spin-On

Recommended Oil: 10W30 Oil Volume with Filter: 2 qt (1.9 L)

Cooling Medium: Air Alternator: 20 amp

Clutch Drive Engagement: Clutchless PTO or centrifugal clutch

Feed System

Feed Roller Orientation: Horizontal

Number of Feed Rollers: 1

Feed Roller Clamp Load: 484 lbs (219.5 kg)
Feed Roller Clamp Type: Feed roller weight only

Feed Roller Dimension: 15.8" dia x 13.5" long (40 cm x 34.3 cm)

Number of Knives: 12

Weight of Feed Roller: 210 lbs (95.3 kg)
Number of Feed Roller Motors: 1
Motor Displacement: 33.1 CID
Motor Manufacturer: White
Feed Speed: 140 ft/min

Infeed Table Width: 48 " (121.9 cm)



Infeed Table Length: 25 " (63.5 cm) Infeed Hopper Height: 32 " (81.3 cm) Infeed Throat Capacity: 9" (23 cm)

Pinch Point - Distance to End of Feed Table: 66 " (167.6 cm)

Distance from Feed Table to Ground: 29 " (73.7 cm)

Infeed Table Material Thickness: .2 " (.5 cm)

Safety System

Bottom Feed Stop Bar: Standard

Bottom Feed Stop Bar Diameter: 2 " (5.1 cm) Bottom Feed Stop Bar Material Thickness: 11 GA

Actuation Force (BFSB): 34 lbs (15.4 kg)

Normal Sensitivity: 22 deg Reduced Sensitivity: 12 deg

Reset Method: Dual green hold-to-run buttons
Four Position Feed Control Bar: Standard

Diameter: 2 " (5.1 cm)

Material Thickness: .1 " (.3 cm)

Positions: Four positions: Emergency stop, forward, stop and reverse

Actuation Force: 34 lbs (15.4 kg)
Green Hold to Run Button: Standard

Drum/Disc Cutting System

Material Capacity: 9 " (22.9 cm)

Thickness: 1 " (2.5 cm) Diameter: 33 " (83.8 cm)

Speed: 1400 rpm

Weight With Shaft: 330 lbs (149.7 kg) Safety Lock - Number of Positions: 6

Number of Knives: 2

Knife Thickness: .6 " (1.6 cm)
Material: A8 chipper steel

Useable Edges: 2

Knife Size: 5" x 11.75" (12.7 cm x 29.8 cm)

Number of Bolts/Knife: 5

Replaceable Threaded Knife Block: Yes

Number of Paddles: 2 Fixture Method: Bolt-on

Air Flow: 933 cfm

Bedknife Size: 5" x 12.1" (12.7 cm x 30.7 cm) horizontal and 5" x 8.8" (12.7 cm x 22.4 cm) vertical

Bedknife Thickness: .8 " (1.9 cm)
Bedknife Material: Grade 50

Bedknife - Number of Useable Edges: 2

Cutter Drive Components - Engine Option One

Number of Bearings: 2 Bore: 2.2 " (5.6 cm)



Type: Dual spherical roller Manufacturer: Linkbelt

Dynamic Capacity: 31400 lbs (14242.8 kg) **Static Capacity:** 54500 lbs (24720.8 kg)

Belt Idler/Tensioner: Yes

Belt Type: Chipper - Polyester Cord with wrap

Discharge System

Chute Height: 96.7 " (245.6 cm)
Bottom Thickness: .1 " (.2 cm)
Top Thickness: .1 " (.3 cm)
Side Wall Thickness: .1 " (.3 cm)
Deflector Thickness: .1 " (.3 cm)
Chute Rotation Angle: 270 deg

Rotation Type: Manual dual handles with pin lock

Rotational Lock: Yes Hydraulic System

Tank capacity: 6.8 gal (25.7 L)

Recommended Oil Type: Vermeer VMF Gold

System Type: Tandem Center Filtration Method: 10 micron return

Pump Flow at Maximum RPM: 4.7 gpm (17.8 L/min)

System relief pressure: 2500 psi (172.4 bar) Auto Reverse PSI: 2300 psi (158.6 bar)

Electrical System

System Voltage: 12 V
Battery: Group 24 - 580 CCA
Standard Gauges: Hour meter
Controller: Vermeer ACS
Shutdown System: Engine

Chassis

Frame Description: 3/16" x 5/6" (.5 cm x 14.2 cm) Z-channel
Tongue Description: 3" x 5" 3/16" (7.6 cm x 12.7 cm x .5 cm) Tube

Hitch Type: Pintle or ball **Fender Description:** Bolt-on

Axle/Suspension: 3500 lb (1587.6 kg)

Type - Option One: Rubber torsional

Manufacturer - Option One: Dexter

Capacity - Option One: 3500 (1587.6 kg)

Tires - Option One: ST215/75R14 Wheels - Option One: 14" (35.6 cm)

Axle/Suspension - Option Two: 3500 lb (1587.6 kg) with electric brakes

Type - Option Two: Rubber torsional Manufacturer - Option Two: Dexter

Other Options



Special Paint: Yes
Extended Warranty: Yes
Preventive Maintenance: Yes

Features & Benefits

Feature: Optional Centrifugal Clutch

Description: Clutch that uses centrifugal force to engage itself. The inner shaft spins

with the engine and as rpms are increased, it causes weighted arms to swing outward to engage the outer shaft which runs a belt and engages the disc on the brush chipper at 1500 rpm.

Benefit: The centrifugal clutch engagement helps prevent the belt from slipping when engaging the clutch, which can mean fewer maintenance costs.

Feature: Bottom Feed Stop Bar

Description: The bottom feed stop bar is strategically located to make it possible for an operator's leg to strike the bar and shut off the feed mechanism, either intentionally or automatically in an emergency situation. Reset/Hold-to-run buttons on each side of the infeed housing allow the operator to readily reset the system if the bar is tripped.

Benefit: Helps to increase operator safety while feeding material.

Feature: SmartFeed

Description: SmartFeed is a patented feed sensing control system which monitors engine rpm and automatically stops and reverses feed rollers when feeding larger, hardwood material. SmartFeed also senses feed roller jams and responds by automatically shifting material back and forth, reducing the need for manual control bar manipulation. With a simple switch, operator can choose between three rpm droop settings to fit the job's specific application.

Benefit: This exclusive system from Vermeer helps increase operator productivity and reduces strain on vital engine parts, as rpm settings are adjustable and automatically monitored.

Feature: Large Infeed Opening

Description: 9" x 14" (23 cm x 35.6 cm) rectangular opening is capable of taking material up to 9" (22.9 cm) in diameter.

Benefit: The larger infeed opening makes feeding irregular material easier and decreases the amount of saw cuts needed prior to feeding the chipper.

Feature: Four-Position Feed Control Bar

Description: A four-position feed control bar is positioned within easy reach of the infeed housing and allows the operator to control the forward or reverse direction of the feed rollers. In addition, the operator can push or pull the feed control bar, stopping the feed roller.

Benefit: This design allows the operator to easily control feed direction and provides an additional way to stop the infeed, enhancing operator safety.

Feature: Dual-Edge Cutter Knives

Description: Dual-edge cutter knives feature two usable edges

Benefit: This helps increase knife life by using two usable edges rather than one.



Feature: Machine Weight

Description: With clutchless PTO the overall weight of the machine is less than 3000 lb (1360.8 kg). Weight with centrifugal clutch is 3100 lb (1406.1 kg).

Benefit: The weight of the machines does not require it to have electric brakes in most states and makes sense for ease of towing for many different vehicles.

Feature: Discharge Chute

Description: The discharge chute has 270 degrees of rotation with a multiple number of chute positions to accommodate most chip trucks.

Benefit: Adjustable chute positions allow chip boxes to be filled evenly while safely directing chips away from the infeed area.

Feature: Hydraulic System

Description: Is a live-type system that is always on when the engine is running.

Benefit: This system gives you the ability to run the hydraulics without the belt engaged so you can reverse material out and trouble shoot at low idle.

Feature: Disc-style chipper

Description: 33" (83.8 cm) diameter disc

Benefit: Disc is suitable for chipping 9" (23 cm) material while being cost-effective.

Feature: 35 hp (26.1 kW) Gas Engine

Description: Air-cooled gasoline engine

Benefit: High torque and power in a compact and lightweight size. The gas engine allows for reduced fuel consumption while still providing power for the high-capacity infeed system.

Feature: Ease of Service

Description: Maintenance and access to areas for required routine maintenance.

Benefit: Direct access to all parts of the chipper for routine maintenance without having to climb on or remove any shields. Disc cover opens fully to allow complete access to cutter knives for inspection and replacement. A dripless oil filter and five grease points are provided to reduce work effort and speed up service time. No need to crawl under machine for routine maintenance.

Last Updated: 06/24/2015

Contains information from Vermeer Corporation operated web site agreement at https://www2.vermeer.com.

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08/27/2015

VERMEER BC900XL BRUSH CHIPPER

Feed Control Bar - Many chippers in use today have mechanical feed control bars that meet the ANSI Z133.1 requirement to include emergency stop devices. Pushing the feed control bar to the center (neutral position) stops the feed rollers, and pushing it toward the discharge spout reverses the feed rollers.



The chipper below "emergency stop device" does not stand out as it does on the Vermeer Chipper above (red).



Bottom Feed Stop Bar - To address the hazard of being pulled into the chipper, one manufacturer has developed and installed a "bottom feed stop bar" (patent pending) on all its new models. It is a pressure sensitive device that cuts off all power completely when 34 pounds of force are applied to the lower edge of the feed table.





Cal-Line Of Sacramento 1430 Auburn Blvd. Sacramento, CA 95815 USA 916-564-1015 (Phone) 915-564-1974 (Fax) www.cal-line.com

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ā.		MODEL	90XP (9" I	DISC STYLE) BRUS	H BANDIT		
Qty	Part #	7.1		Description			Base Price
1	MODEL-90	Model 90XP - (9" Dis	c Style) Brush	Bandit			\$ 18725.00
			STAND	ARD EQUIPMENT	0.00		
Qty	Part #			Description			Price
1	1 STANDARD Spring loaded slide		oy (2) 15.5 hyd	system with (2) horizontal for draulic motors (Provides ap			\$ 0.00
1	STANDARD		ck mount with locking pin to raise & lock top feed wheel using tongue when hydraulic lift cylinder option is selected)			ngue	\$ 0.00
1	STANDARD 29" high x 35" wide tapered infeed hopper with 30" fold down infeed hopper tray					\$ 0.00	
1	STANDARD 360 degree manua		I swivel discharge chute with 12" adjustable chip deflector			\$ 0.00	
1	STANDARD Clean out and insp		ection door on discharge			\$ 0.00	
1	STANDARD 30" diameter x 1-1 1/2" x 4" x 5 1/8" d		/2" thick (2 knife pocket) chipper disc, each pocket equipped with (2) ual edge knives			n (2)	\$ 0.00
1	STANDARD 7 gallon steel hydra		aulic tank with magnetic drain plug			\$ 0.00	
1_			fuel tank with magnetic drain plug			\$ 0.00	
1			rubber mounted LED taillights, 6 prong replaceable coiled power cord duty wiring with junction box, and LED clearance lights with reflectors.			\$ 0.00	
1	STANDARD 5,000 pound capac		city tongue jack with 15" of travel and foot pad			\$ 0.00	
1			controls forward / neutral / reverse			\$ 0.00	
1	STANDARD Engine disable plug place		g for hood locking pin-preventing engine from operating without pin in		pin in	\$ 0.00	
1	STANDARD Wooden pusher too		ol with mount on infeed hopper			\$ 0.00	
1	STANDARD (2) Last chance sa					\$ 0.00	
1	STANDARD Weather resistant m					\$ 0.00	
1	STANDARD	Safety DVD, (2) 6" wide x 9" tall Bandit operator's manuals (one paper copy and one waterproof copy tethered to machine) and (1) engine operator's manual			ne	\$ 0.00	
1	STANDARD Spanish & English combination safety decals				\$ 0.00		
1	STANDARD	Banded chipper belts					\$ 0.00
				PAINT			
Qty	Part #		Descri	ption	Unit Pri	ce	Total

1	333-28984	Standard Imron Industrial Urethane Green (For Whole Tree Chippers please specify Chipper Guard paint color)	\$ 0.00	\$ 0.00
		ENGINE		
Qty	Part#	Description	Unit Price	Total
1	990-RC1194-775	Kohler CH1000, 37 horsepower gas engine	\$ 3750.00	\$ 3750.00
		BATTERY/BATTERY BOX		
Qty	Part #	Description	Unit Price	Total
1	990-100260	Lockable aluminum battery box with (1) 1,010 CCA Interstate battery	\$ 0.00	\$ 0.00
		AXLE		7-0.0
Qty	Part #	Description	Unit Price	Total
1	990-1014-86	Single 6,000 pound Torflex EZ lube axle with electric brakes	\$ 0.00	\$ 0.00
100		TIRES/RIMS		
Qty	Part #	Description	Unit Price	Total
1	990-1014-87	(2) 225/75R 15" tires mounted on 6-bolt white modular rims	\$ 0.00	\$ 0.00
		FENDERS		
Qty	Part #	Description	Unit Price	Total
1	990-100515	Heavy-duty steel weld on fenders	\$ 125.00	\$ 125.00
		HITCH		
Qty	Part #	Description	Unit Price	Total
1	990-100274	2 1/2" Wallace Forge pintle hitch	\$ 0.00	\$ 0.00
		ADD-ON OPTIONS		
K .		Feed System Options		
Qty	Part #	Description	Unit Price	Total
1	990-100165	Double teeth on bottom feed wheel (17" wide feed wheel)	\$ 130.00	\$ 130.00
		Engine Related Options		
Qty	Part #	Description	Unit Price	Total
1	990-100029	Automatic feed system governor with digital tach/hour meter (non-reversing)	\$ 825.00	\$ 825.00
		CUSTOMER TOTALS		
	Total Unit Price:			
		Customer Dis	scount: 10.0000 %	- \$ 2355.50
	Customer Net Unit Price: Sales Tax: 8.0000 % Customer Total:			
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Comm		COMMENTS		
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		SIGNATURE		TT 1
The E	uyer, whose name a	and address appears above, agrees to purchase from the Seller, whos	e name and address appea	rs above, the
		ices stated and upon the terms and conditions of this agreement.		
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Date

Signature